(c) The red flag or the red light is visible from all sides of the tankship.

§153.955 Warning signs during cargo transfer.

- (a) When transferring cargo while fast to a dock or at anchor in port, the master shall ensure that the tankship displays a warning sign at the gangway facing the shore so that it may be seen from the shore and another warning sign facing outboard toward the water so that it may be seen from the water. (See figure 1).
- (b) Except as provided in paragraph (f) of this section, each warning sign must have the following legends:

- (1) Warning.
- (2) Dangerous Cargo.
- (3) No Visitors.
- (4) No Smoking.
- (5) No Open Lights.
- (c) Each letter must be block style, black on a white background.
 - (d) Each letter must:
 - (1) Be 7.5 cm (approx. 3 in.) high;
- (2) Be 5 cm (approx. 2 in.) wide except for "M" and "W" which must be 7.5 cm (approx. 3 in.) wide and the letter "I" which may be 1.3 cm (approx. ½ in.) wide; and



Figure 1 - Minimum Dimensions for Warning Sign

- (3) Have 1.3 cm (approx. $\frac{1}{2}$ in.) stroke width.
 - (e) The spacing must be:
- (1) 1.3 cm (approx. ½ in.) between letters of the same word;
 - (2) 5 cm (approx. 2 in.) between words;
- (3) 5 cm (approx. 2 in.) between lines; and
- (4) 5 cm (approx. 2 in.) at the borders of the sign.
- (f) Except as described in §153.1045, the legends "No Smoking" and "No Open Lights" are not required when the cargoes on board the tankship are neither flammable nor combustible.

§153.957 Persons in charge of transferring liquid cargo in bulk or cleaning cargo tanks.

- (a) The owner and operator of the vessel, and his or her agent, and each of them, shall ensure that—
- of them, shall ensure that—
 (1) Enough "Tankerman-PICs" or restricted "Tankerman-PICs", and "Tankerman-Assistants", authorized for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or to safely clean cargo tanks;
- (2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a qualified person designated as a person in charge of the transfer or the cleaning under Subpart C of 33 CFR part 155;

§ 153.959

(3) When cargo regulated under this part is due for transfer, the person in charge of the transfer has received special training in the particular hazards associated with the cargo and in all special procedures for its handling; and

(4) On each foreign vessel, the person in charge understands his or her responsibilities as described in this sub-

chapter.

(b) Upon request by the Officer in Charge, Marine Inspection, in whose zone the transfer will take place, the owner and operator of the vessel, and his or her agent, and each of them, shall provide documentary evidence that the person in charge has received the training specified by paragraph (a)(3) of this section and is capable of competently performing the procedures necessary for the cargo.

[CGD 79-116, 60 FR 17158, Apr. 4, 1995]

§153.959 Approval to begin transfer operations required.

No person may make connections for cargo transfer or transfer cargo unless he has authorization from the person in charge of cargo transfer.

§153.964 Discharge by gas pressurization.

The person in charge of cargo transfer may not authorize cargo discharge by gas pressurization unless:

(a) The tank to be offloaded has an

SR or PV venting system;

- (b) The pressurization medium is either the cargo vapor or a nonflammable, nontoxic gas inert to the cargo; and
 - (c) The pressurizing line has:
- (1) A pressure reducing valve whose setting does not exceed 90% of the tank's relief valve setting and a manual control valve between the pressure reducing valve and the tank; or

(2) For an inert gas medium:

- (i) A safety relief valve with a cross sectional flow area at least equal to that of the pressurizing line and whose relieving pressure does not exceed 90 percent of the tank's relief valve setting;
- $(i\bar{i})$ A manual control valve between the safety relief valve and the tank; and
- (iii) A check valve between the manual control valve and the tank.

§153.966 Discharge by liquid displacement.

The person in charge of cargo transfer may not authorize cargo discharge by liquid displacement unless the liquid supply line to the tank has:

- (a) A safety relief or pressure reducing valve set to operate at no more than 80 percent of the tank's relief valve setting; and
- (b) A manual control valve between the tank and the supply line's safety relief valve or pressure reducing valve.

§153.968 Cargo transfer conference.

- (a) Before he may begin making connections for cargo transfer, the person in charge of cargo transfer shall confer with the person supervising the cargo transfer at the facility.
- (b) The person in charge of cargo transfer shall discuss the important aspects of the transfer operation, such as the following, with the supervisor at the facility:
 - (1) The products to be transferred.
- (2) The cargo loading rates marked on the cargo piping plan or the maximum safe transfer rates.
- (3) The critical or hazardous stages of the transfer operation.
- (4) The emergency procedures in case of a spill.
- (5) If the vessel is equipped with the tank overflow alarm prescribed in §153.408(c), a procedure for shutdown of shore pumps, shore valves, and ship's valves that prevents piping system pressures from exceeding those for which the piping system is designed.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 78-128, 47 FR 21211, May 17, 1982; CGD 81-078, 50 FR 21174, May 22, 1985]

§153.970 Cargo transfer piping.

The person in charge of cargo transfer shall ensure that:

- (a) Cargo is transferred to or from a cargo tank only through the tankship's cargo piping system;
- (b) Vapor not returned to shore through the tankship's vapor return system is discharged at the height required for the cargo's vent riser in Table 1, and
- (c) All cargo vapor is returned to shore through the valved connection on the venting system if: